

FIG. 2A

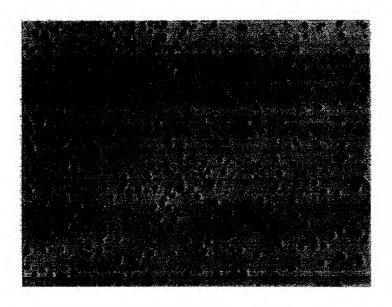


FIG. 2B

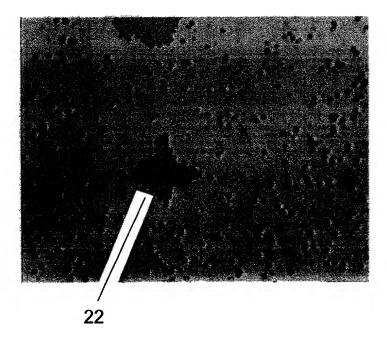


FIG. 2C

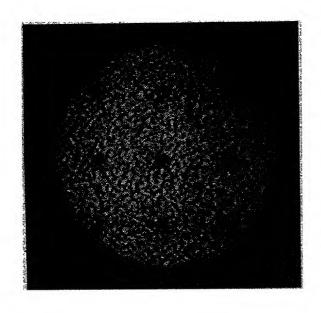
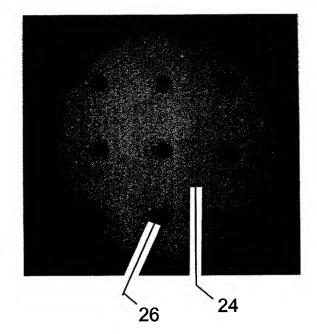
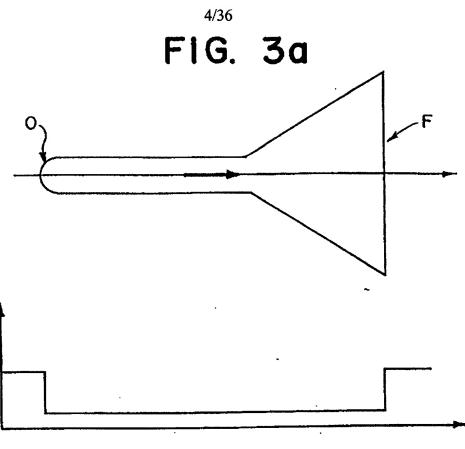


FIG. 2D





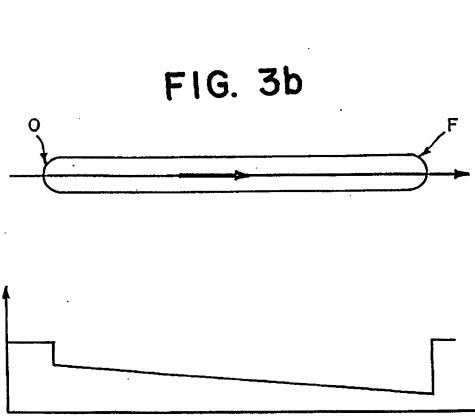


FIG. 3C

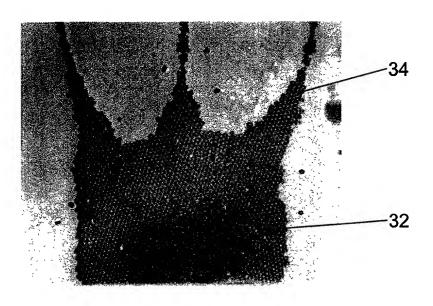


FIG. 3D

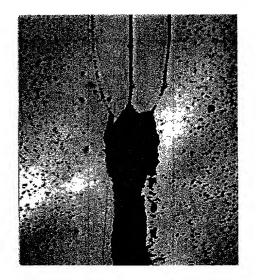


FIG. 4A

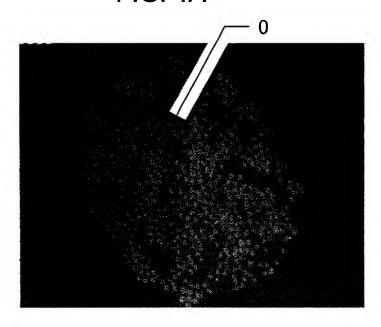


FIG. 4B

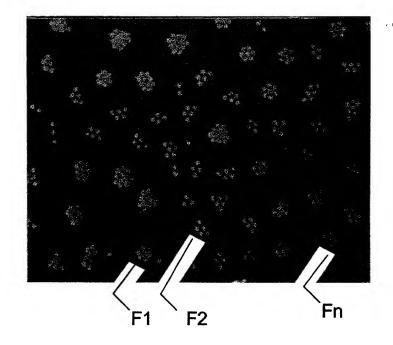
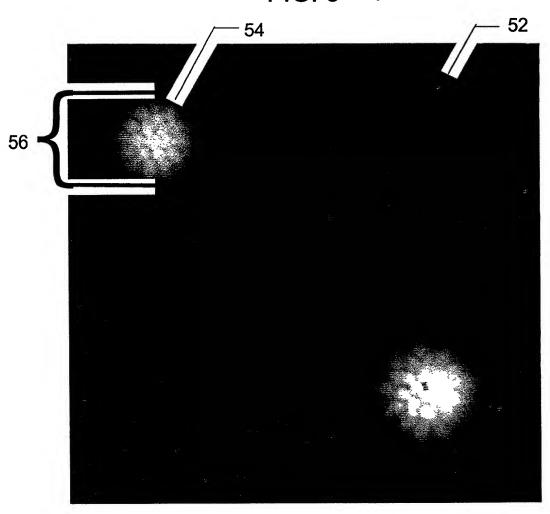
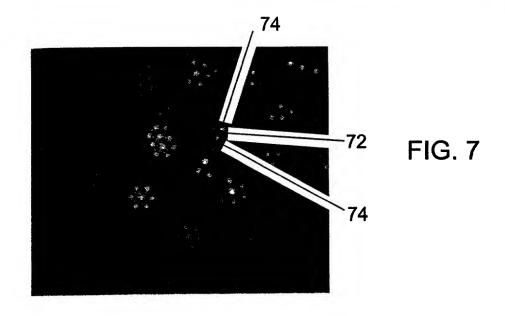


FIG. 5





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FIG. 6a

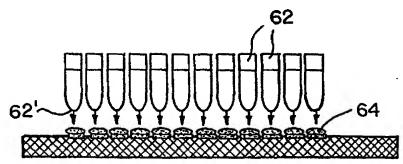
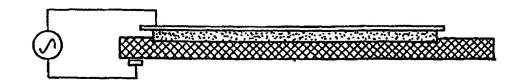
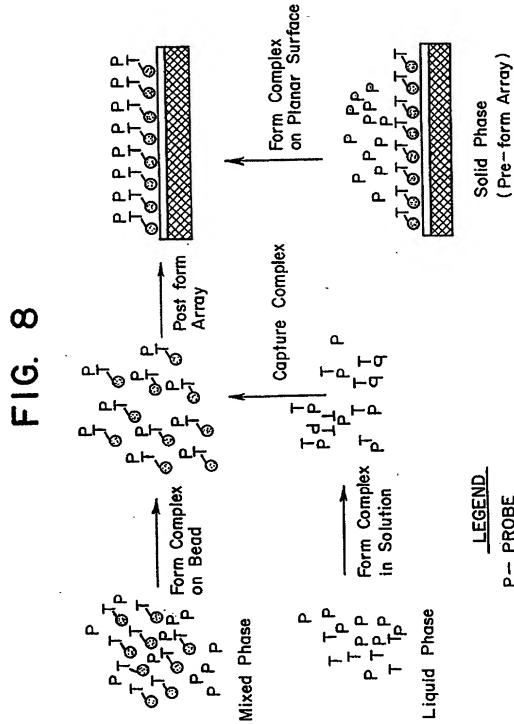


FIG. 6b



FIG. 6c





LEGEND
P-PROBE
T-TARGET
PT-P-T COMPLEX

FIG. 9a

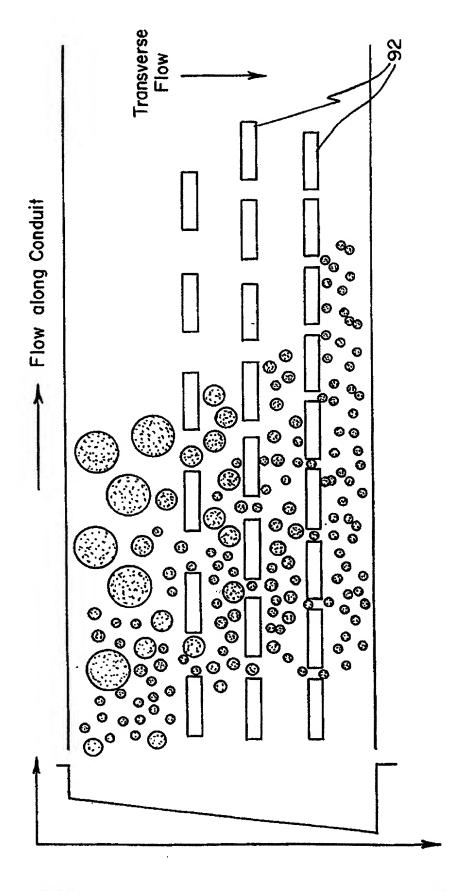


FIG. 9b

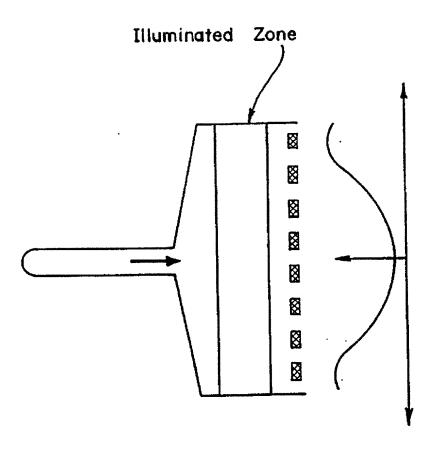
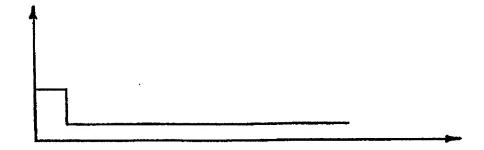


FIG. 9c



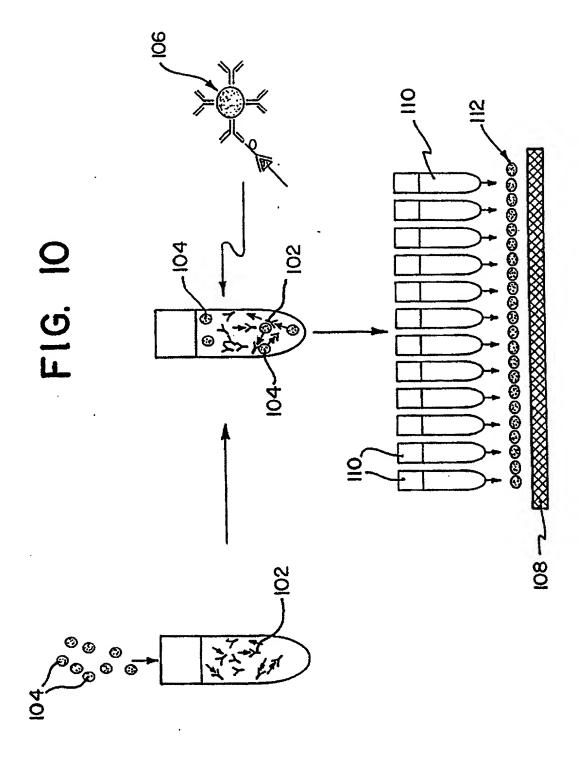


FIG. IIa

FIG. 11b

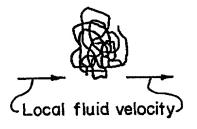
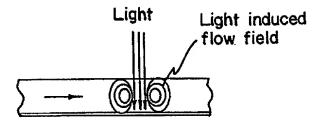
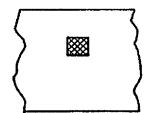


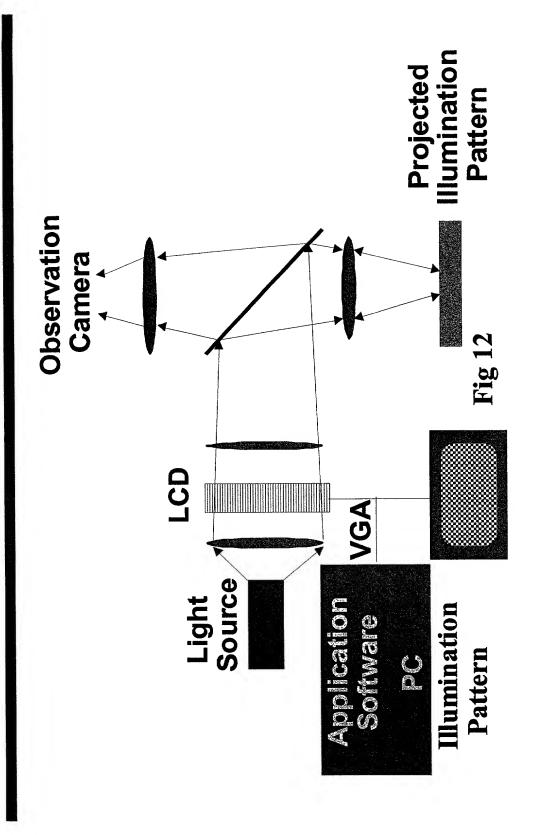
FIG. IIc

FIG. 11d

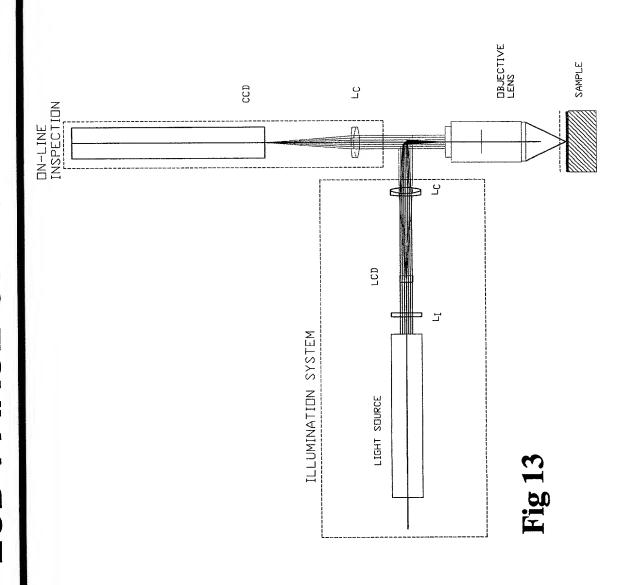




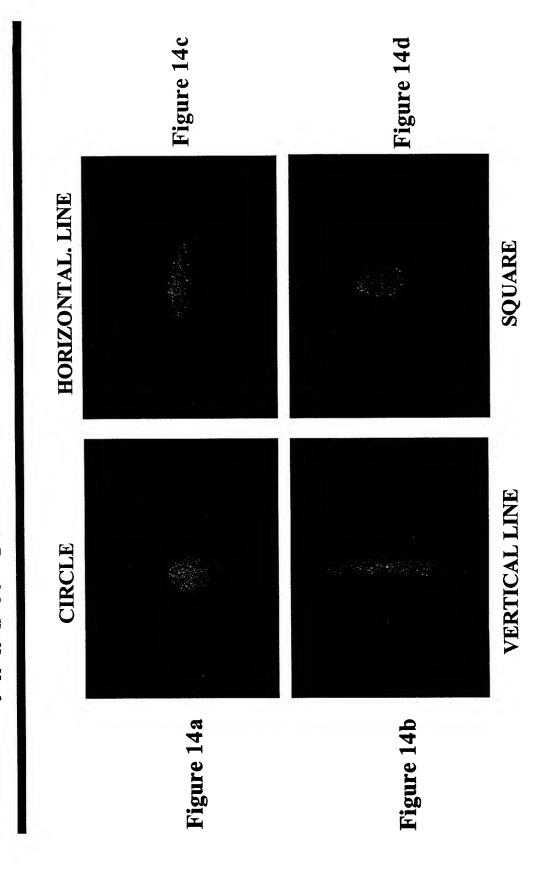
ILLUMINATION PATTERN GENERATOR



LCD-PARSE OPTICAL DESIGN



ARRAY SHAPE ADJUSTMENTS



COLLECTION AND ARRAY ASSEMBLY

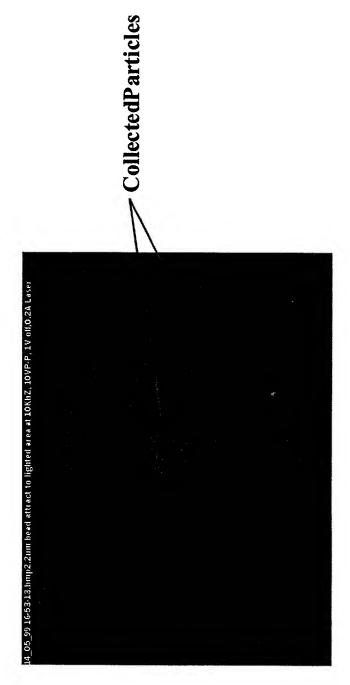


Figure 15a

EXPULSION AND CONFINEMENT

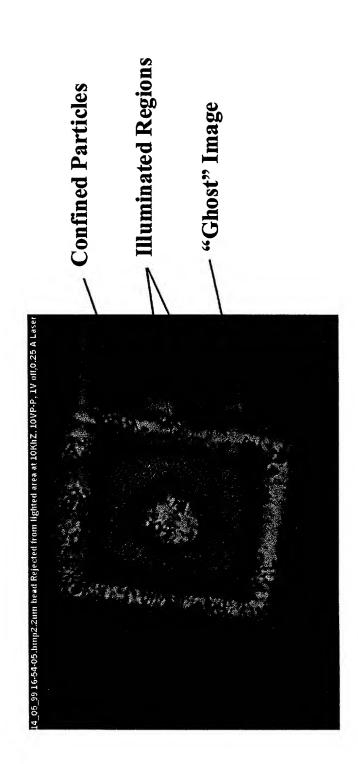


Figure 15b

DRAG AND DROP

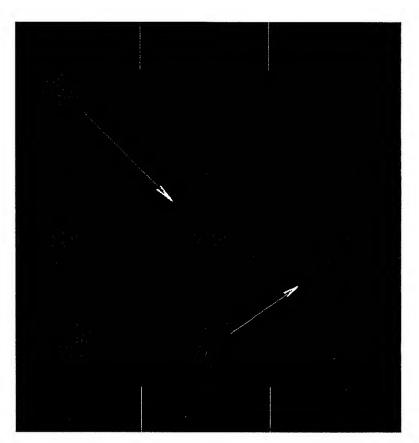


Figure 16

Porgrammable Array Reconfiguration and Segmentation

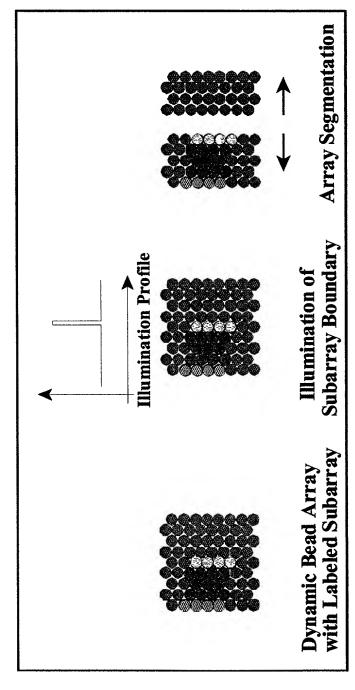
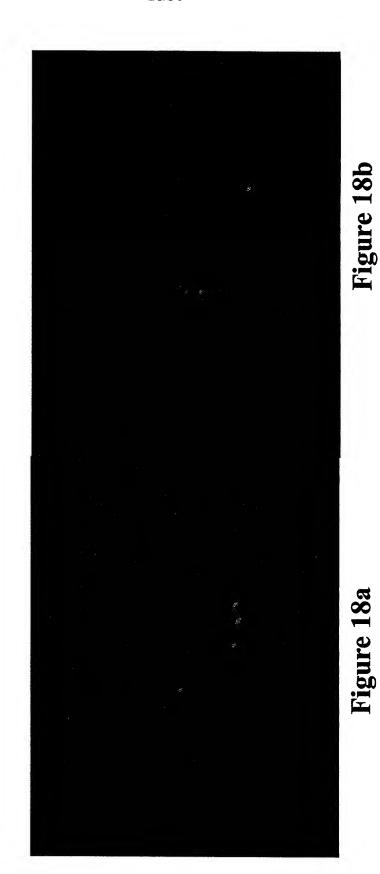


Figure 17

LCD PARSE



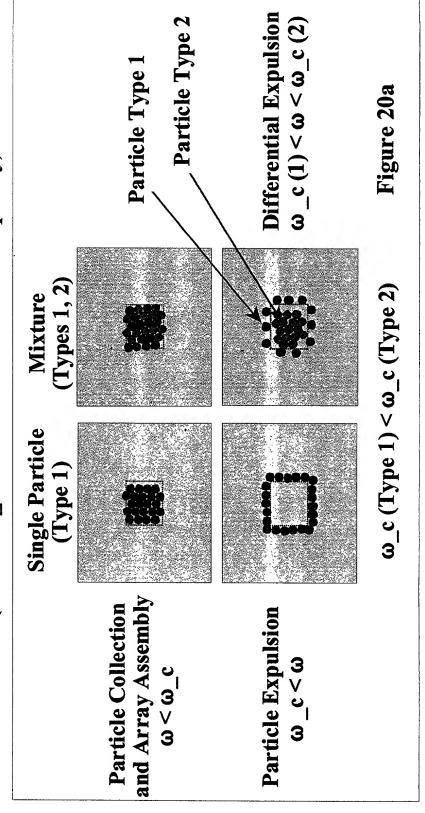
LCD PARSE



Figure 19

FRACTIONATION

Differential Frequency Dependence of Particle Expulsion (NOTE: ω_c denotes a characeristic frequency)



FRACTIONATION

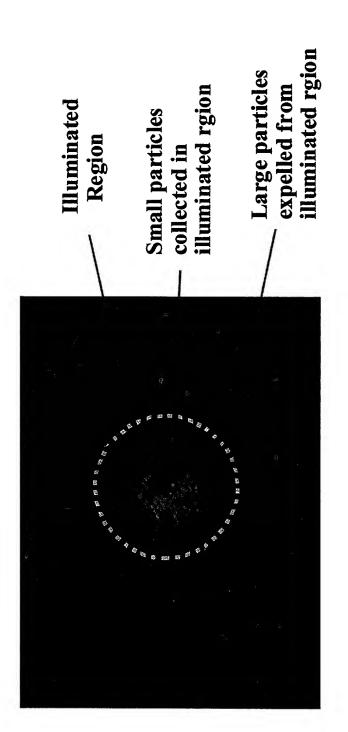


Figure 20b

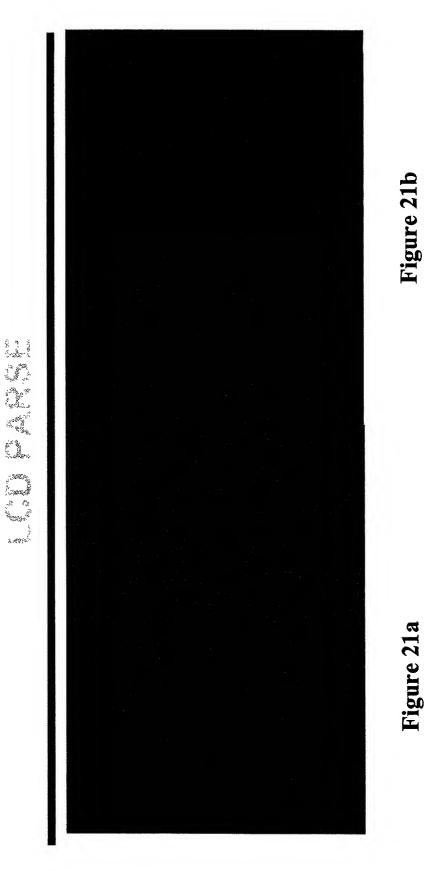


Figure 21a

Figure 22a

Selective Segments don ("Painting")

Selective Segments don ("Painting")

Selective Segments don ("Painting")

Single Step Carrier Coding

- Optical
- halk staining (1-100)
- 'stacking"
- Defectife (1-6)

A. CHEMICAL ENCODING

Mutt-Ste:

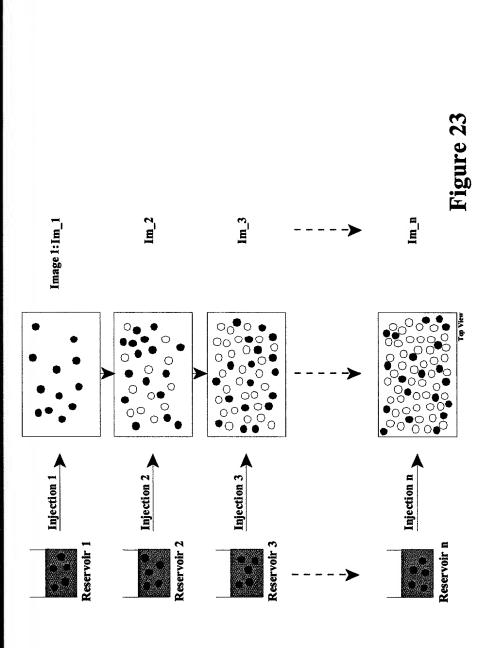
Random Sequential Injection

1 - Pre-Processing

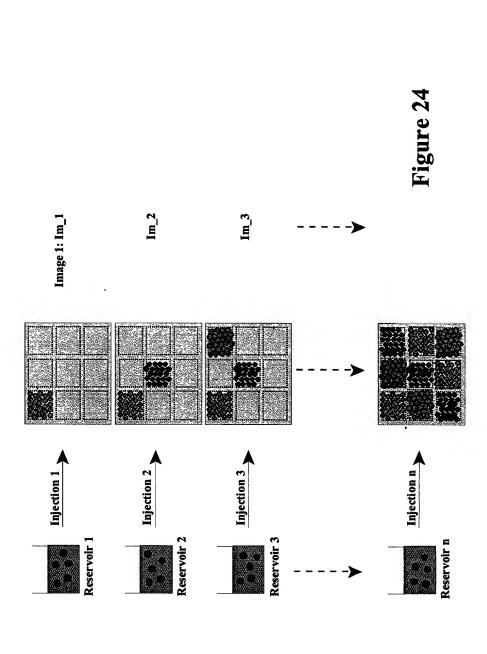
2 - Post-Processing

Encoding Methodologies

RANDOM SEQUENTIAL INJECTION



SEQUENTIAL INJECTION & LIGHT-CONTROLLED ARRAY PLACEMENT



MACRO-TO-MICRO TANSITION

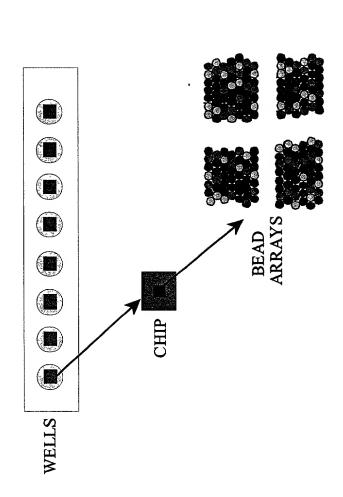
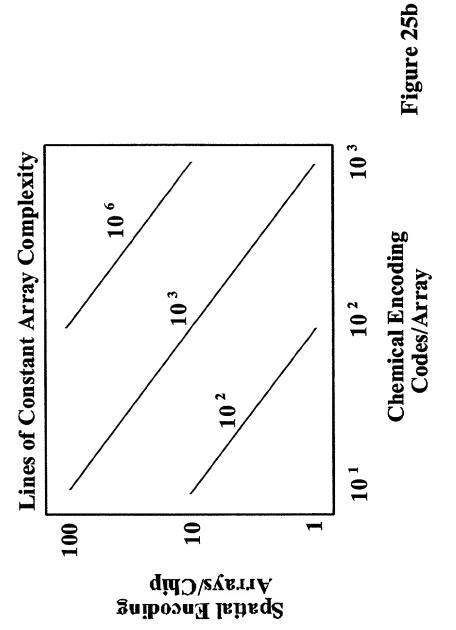
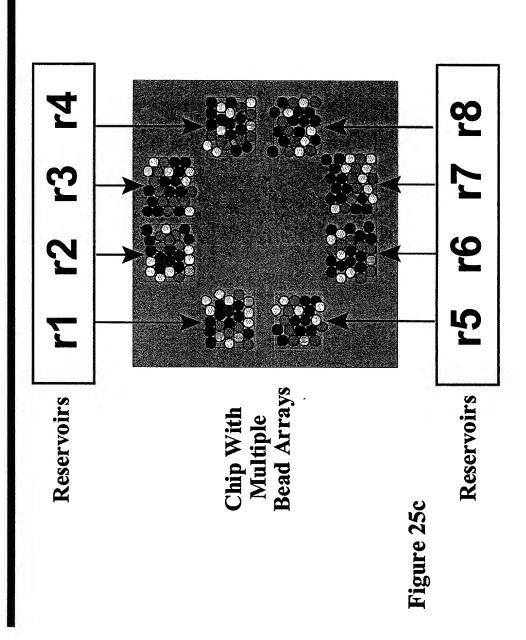


Figure 25a

ARRAY ENCODING



ARRAY ENCODING



SEQUENTIAL ASSEMBLY: "BANDING"

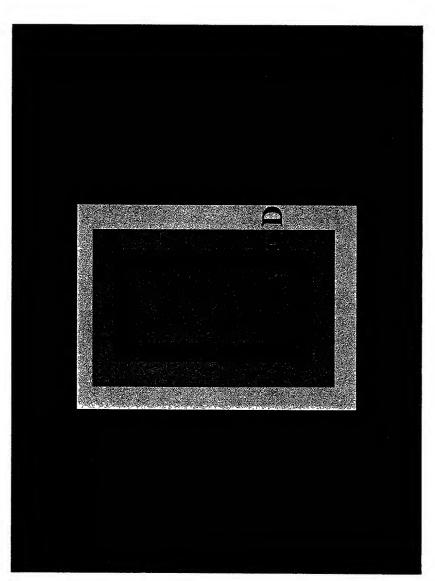
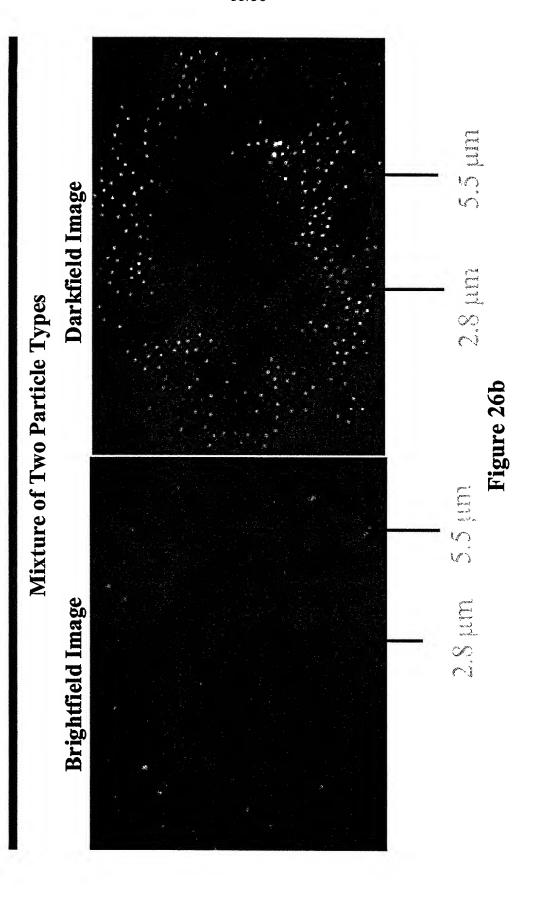


Figure 26a

SEQUENTIAL ASSEMBLY: "BANDING"



LCD PARSE

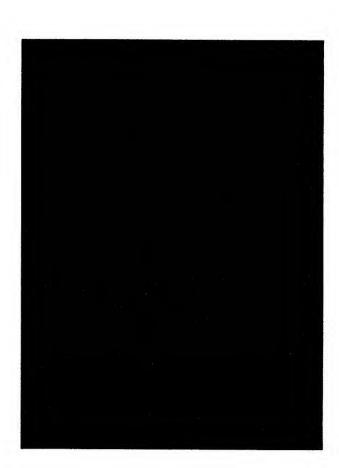


Figure 27

ARRAY OF RANDOM SUBARRAYS

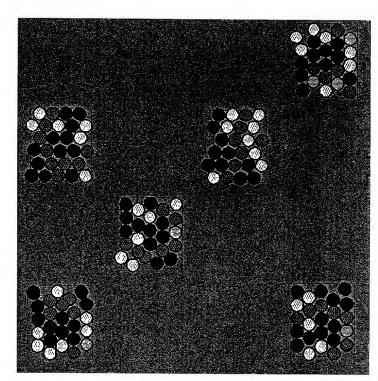


Figure 28

LIGHT-INDUCED FLUID FLOW

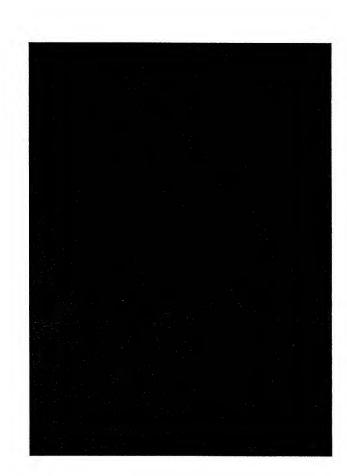


Figure 29